

and canals except under a licence, (2) the use of small meshed nets and fixed engines, (3) sale of certain important species of fish caught in contravention of rules, and imposes (4) a close season for fishing during the breeding period of the fish.

Legislation, undoubtedly, prevents the depletion of the rivers by such harmful methods as small meshed nets, traps and fixed engines and thus helps in improving the fisheries. But the Indian Fisheries Act, IV of 1897, without any rules or without any machinery to work its provisions, is entirely inadequate to afford any substantial protection to the fisheries.

For the conservation of our existing fisheries, it is desired, that all Provincial Governments, where no rules or regulations for the protection of fisheries at present exist, may be advised to enact protective legislation and at the same time create an agency to work its provisions. The legislation should specially provide for the following:—

1. Control of all kinds of fishing under a licence.
2. Prohibition of small meshed nets, fixed engines, erection of dams and diversion of water for catching fish.
3. Imposition of a size limit below which no fish of such important species as Mahsir (*Barbus tor*), and others can be killed.
4. Provision of a close season during the breeding period of fish.
5. Prohibition of the sale of certain important species of fish caught in contravention of rules.

LAHORE,
7th July 1944.

HAMID KHAN, PH.D. (Cantab), F.A.SC.,
Game Warden, Punjab.

18.—ECOLOGICAL AND SPECIFIC VARIATION IN THE CAMOUFLAGE DEVICES OF SPIDER WEBS.

I am at present collecting records of orb webs with camouflage devices. Such spiders as the members of the Genus, *Argiope*, *Uloboridae* and *Cyclosa* are common through the tropics.

Hingston in his paper *Devices of Spiders' snares* (*P.Z.S.* 1927 Vol. xviii) gives an outline of the more common web designs, which is useful for reference.

The preparation of webs is quite easy. A sheet of white paper is covered with any good dilute gum, and then placed close to the web. The supports are then broken and the web and paper dried.

I process these webs with water colour to make the webs stand out.

The webs should be accompanied by the spider, in a small paper packet, and with notes on—

1. Where collected.
2. Whether grassy, or shrub ground, or in house, etc.
3. Some indication as to whether the web is exposed to direct sunlight and the amount of illumination.

The webs should be sent to my home address, as my army address is not very permanent. My address is as follows:—

35, HIGH PARK DRIVE,
HEUTON, BRADFORD,
YORKS, ENGLAND.

Any webs which you may send will be very acceptable and will help considerably in increasing the extent of my records.

S.E.A.C.,
11th October 1945.

J. E. MARSON, F.R.E.S.

19.—NOTES ON THE GIANT WOOD SPIDER (*NEPHILA MACULATA*) IN BURMA.

(With 2 plates).

Nephila maculata is very widely distributed in Burma. My own records for 1945 give the distribution as follows: 3-2-45 Maungdaw; 23-2-45 Ramree Island; 27-5-45 Taungup; 7-9-45 mile 35 Toungoo Mawchii Road; 14-9-45 mile 53 Toungoo Mawchii Road; 1-10-45 Mawchii.

The structure and method of spinning the web is very well described in Hingston's paper 'The Snare of the Giant Wood Spider'.¹ I would however like to add the following notes on the web.

It is very common to find that the female *Nephila* uses a maze of irregular webbing at one or both sides of the large orb web. Hingston comments on this point as follows²: 'There is another structure in the architecture of the *Nephila* which I have not observed in ordinary snares. Not only does she spread an extensive sheet; but she also constructs a special barrier in order to drive her victim more surely into the toils. She places it so as to face one surface of the sheet, it is at a slightly higher level than the main snare and a little distance away. There is nothing precise or geometrical in its workmanship, it is merely a tangled maze of lines.'

This addition of an irregular maze of webbing at one or both sides of an orb web is not uncommon amongst orb-web spinners, especially in the case of immature females, and with webs in shaded places. This is quite common with species of *Gasterocantha*, especially with *G. brevispina*. In these cases it is usual for the maze webbing to be dotted with patches of white webbing about a quarter of an inch long.

The structure of which Hingston says³ 'she places it so as to face one surface of the sheet, it is at a slightly higher level than

¹ Hingston.—The Snare of Giant Wood Spider; *Journal of the Bombay Nat. Hist. Society*: Part I Volume xxxviii pages 642-649; Parts II & III Vol. xxviii pages 911-923; Part IV Volume xxix pages 70-75.

² As above.—Part III page 918, lines 18-31.

³ As above.—Part III page 918, lines 21-22.